

The present invention allows a picture with one aspect ratio to be displayed on a display having another aspect ratio. This is implemented in the presently claimed invention as follows. First, in all of the present claims, picture data is converted to second picture data or a frame, and the second picture data or frame is enlarged and displayed, where the aspect ratio of the picture data before conversion is different from the aspect ratio of the enlarged picture or frame that is displayed. Thus in all of the claims, the conversion changes the aspect ratio of the picture data. Second, all of the claims also require that the second picture data or frame has a reduced number of lines sandwiched between two black areas. Kato fails to disclose either (1) converting and enlarging picture data with one aspect ratio to an enlarged picture or frame with another aspect ratio, or (2) the converted picture data having an area with a reduced number of lines sandwiched between two black areas.

First, Kato discloses pixel density conversion, which is different from converting and enlarging picture data with one aspect ratio to an enlarged picture or frame with another aspect ratio as in the presently claimed invention. Kato discloses a pixel density conversion unit for half-tone images suitable to enlarge or reduce the half-tone images (col. 6, lines 3-9). Kato specifically discloses, for example, a density conversion ratio of 2/3 for pixel density conversion (col. 9, lines 25-38, FIG. 10A).

Pixel density conversion, however, is different from converting and enlarging picture data with one aspect ratio to picture data with another aspect ratio. With the pixel density conversion of Kato, the ratio of the number of white pixels to the number of black pixels may be changed (col. 18, lines 27-34). Changing the pixel density, i.e., changing the ratio of the number of white pixels to that of the number of black pixels, however, is not the same as converting the aspect ratio. As disclosed in the present specification on page 1, and as is known in the art, the aspect ratio of picture data is the ratio of the width to height of a picture. Pixel density conversion is not the same as conversion of an aspect

ratio. While Kato may disclose pixel density conversion, Kato does not disclose converting and enlarging picture data with one aspect ratio to picture data with another aspect ratio.

Second, Kato does not disclose converted picture data having an area with a reduced number of lines sandwiched between two black areas as claimed. As discussed above, Kato discloses a density conversion process for half-toned processed images where the ratio of the number of white pixels to that of the number of black pixels may be changed (col. 18, lines 27-34). Applicant submits that Kato's black pixels are not the same as the black areas as recited in the present claims, and therefore Kato does not disclose sandwiching an area with a reduced number of lines between black pixel areas.

Moreover, even if the black pixels in Kato could be considered to have an overall black area, this overall area of the black pixels does not sandwich an area with a reduced number of lines. In other words, the area of black pixels is not on either side of an area with a reduced number of lines. Thus, Kato does not disclose converted picture data with an area having a reduced number of lines sandwiched between two black areas.

For the reasons given above, applicant submits that all of the claims are patentable over Kato, and, accordingly, respectfully requests that the rejection under 35 U.S.C. 103 be withdrawn.

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CONCLUSION

In view of the foregoing remarks, applicant respectfully submits that all of the pending claims are now in condition for allowance. An early notice to this effect is earnestly solicited. If there are any questions regarding the application, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

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